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WO-Patent Application No.: PCT/IB2005/001101
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Our Ref.: WO 44096**CLAIMS**

(as amended under Art. 34 PCT)

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1. A fuel cell system including:
a fuel cell body (S);
a first portion (2) and a second portion (7) which
form a passage (2a, 5, 6, 7d) for hydrogen exhausted from
the fuel cell body (S); and
a hydrogen exhaust valve (3; 4) disposed in the
passage (2a, 5, 6, 7d) between the first portion (2) and
the second portion (7),
characterized in that
the first portion (2) and the second portion (7) are
directly fixed to each other and are both continuously
supplied with heat from the fuel cell body (S) following
start up of the fuel cell body (S).
2. A fuel cell system according to claim 1, wherein the
first portion is a gas-liquid separation unit (2)
supplied with heat from inflowing exhaust gas from the
fuel cell body (S).
3. A fuel cell system according to claim 1, wherein the
first portion is an end plate provided in a stack
configured by the fuel cell body (S) and supplied with
heat liberated by the stack.
4. A fuel cell system according to any one of claims 1
to 3, wherein the second portion is a hydrogen processing

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unit (7) supplied with heat from inflowing exhaust gas from the fuel cell body (S).

5. A fuel cell system according to claim 4, wherein the hydrogen processing unit is a dilation unit (7).

6. A fuel cell system according to claim 4, wherein the hydrogen processing unit is a combustion unit.

10 7. A fuel cell system according to any one of claims 1 to 6, wherein

one of the first portion (2) and the second portion (7) includes a cover (7a) formed with an internal space that accommodates the hydrogen exhaust valve (3, 4); and

15 the other one the first portion (2) and the second portion (7) closes the internal space of the cover (7a) within which the hydrogen exhaust valve (3; 4) is disposed.

20 8. A fuel cell system according to any one of claims 1 to 7, wherein a spring member (12; 13) is interposed between the hydrogen exhaust valve (3; 4) and one of the first portion (2) and the second portion (7) to urge the hydrogen exhaust valve (3; 4) against the other one of
25 the first portion (2) and the second portion (7).

9. A fuel cell system according to any one of claims 1 to 7, wherein the hydrogen exhaust valve (3; 4) is fixed to the first portion (2) and the second portion (7).

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10. A fuel cell system according to any one of claims 1 to 9, wherein seal mechanisms (8, 9; 10, 11) are respectively interposed between the hydrogen exhaust valve (3; 4) and each of the first portion (2) and the
35 second portion (7).